

- BONDIN, M.A.; SINYAKOV, O.G., inzh.; SHIRKEVICH, N.S., inzh.; POPOVICH, M.V.;
TATARNIKOV, M.N.; BALANDIN, A.A., inzh.; KHOLODKOV, N.Ye.;
KOLEVATYKH, S.F., inzh.

Exchange of practices by the enterprises of economic councils.
Torf. prom. 39 no.6:28-35 '62. (MIRA 16:7)

1. Kalininskiy sovet narodnogo khozyaystva (for Bondin). 2.
 2. Torfopredpriyatiye Vasilevichi II (for Sinyakov, Shirkevich,
Balandin, Kholodkov). 3. Nachal'nik konstruktorskogo byuro
Tesovskogo transportnogo upravleniya (for Popovich). 4. Starshiy
inzh. konstruktorskogo byuro Tesovskogo transportnogo upravleniya
(for Tatarnikov). 5. Yaroslavskoye torfopredpriyatiye Yaroslavskogo
narodnogo khozyaystva (for Kolevatykh).
- (Peat machinery—Technological innovations)

POPOVICH, M.V., inzh.

Mechanization of tie tamping operations in peat transportation.
Torf. prom. 40 no.2:15-18 '63. (MIRA 16:4)

1. Tesovskoye transportnoye upravleniye.
(Railroads, Industrial—Maintenance and repair)
(Peat industry)

POPOVICH, M.V. [Popovych, M.M.]

Present-day philosophical irrationalism. Nauka i zhyttia 9
no.12:55-56 D '59. (MIRA 13:4)
(Philosophy)

SOV/124 58-4 4764

Translation from: Referativnyy zhurnal, Mekhanika, 1958. Nr 4. p 153 (USSR)

AUTHORS: Popovich, N. A., Shkol'nyy, P. A.

TITLE: Effect of Bond Failure Between Concrete and Reinforcement Upon the Carrying Capacity of Reinforced concrete Components Subjected to Bending (Vliyaniye narusheniya svyazi armatury s betonom na nesushchuyu sposobnost' izgibayemykh zhelezobetonnykh elementov)

PERIODICAL: V sb.: Khar'kovsk. obl. nauchno-tekhn. soveshchaniye po zhelezobetonnykh konstruktsiyam 13-15 dek. 1954 g. Khar'kov, 1956, pp 29-33

ABSTRACT: Observational results are given for the behaviour of girders and coverings brought to the point of failure. Comparison of data proposed by different authors for determination of flexure is made, and it is affirmed that flexure determined with the aid of the normal value of the modulus of elasticity of the reinforcement without taking into consideration the elongation of the concrete compares well with the experimental results.

Card 1/1 1. Reinforced concrete--Failure 2. Concrete--Adhesion
3. Steel--Adhesion I. K. Snitko

BLYAKHEROV, V.F. (Dneprodzerzhinsk); POPOVICH, N.A., kand.tekhn.nauk
(Khar'kov)

Recommendations that were not thought through. Osn., fund.i mekh.
grun. 3 no.6:26-27 '61. (MIRA 15:4)
(Foundations)

MAKSIMOV, A.I., inzh.; POBEGAYLO, K.M., inzh.; MAKSIMOVA, V.I., inzh.;
POPOVICH, N.A., inzh.; FILATOVA, L.I., inzh.; SHAKHANOV, V.S., inzh.

Economically expedient distribution of reserves in the electric
power plants of the electric power system of the Donets Basin
using a compensation technique. Elek.sta. 34 no.2:52-59 F '63.
(MIRA 16:4)

(Donets Basin--Electric power plants)

CHI OGOLYA, G.; BERAL, Kh.; VASIL'YEV, P.; POPOVICH, N.; KOSMIN, Anna;
MADZHARU, M.; YAKOB, A.; LAKATOSH, L.; DIAKU, D.; PATRASEKU, S.

Determination of bismuth in Rumanian drugs by means of EDTA titration.
Spt.delo 8 no.6:67-69 N-D '59. (MIRA 13:4)

1. Iz Instituta po lintrolyu kachestva medikamentov Ministerstva
zdravookhraneniya Rumynskoy Narodnoy Respubliki, Bukharest.
(BISMUTH--ANALYSIS)

POPOVICH, N. A.

Popovich, N. A.

"Investigation of Concrete and Reinforced-Concrete Curved Parts with Sharp Changes in Exterior Outlines. Min Higher Education USSR. Khar'kov Construction Engineering Inst. Chair of Reinforced-Concrete Structures. Khar'kov, 1955 (Dissertation for the degree of Candidate in Technical Science)

SO: Knizhnaya letopis' No. 27, 2 July 1955

STUGREN, B.; POPOVICH, N. [Popovici, N.]

Analyzing the variability of external characters in the *Bombina*
species of Rumania. Zool. zhur. 40 no.4:568-576 Ap '61.
(MIRA 14:3)

1. Department of Zoology, University of Babesh-Boylai (Kluzh,
People's Republic of Rumania).
(Rumania--Amphibia)

VLADOVSKIY, Mikhail Semenovich; KOTLYAROV, P.F., inzh.; KIKIN, A.I., doktor tekhn. nauk, prof., retsenzent; POPOVICH, N.A., kand. tekhn. nauk, dots., retsenzent; OKHAYNETS, G.A., kand. tekhn. nauk, dots., otv. red.; NESTERENKO, A.S., red.; TROFIMENKO, A.S., tekhn. red.

[Open crane gantries; performance and design] Otkrytye podkranovye estakady; deistvitel'naya rabota i proektirovanie. Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M.Gor'kogo, 1961. 210 p. (MIRA 15:4)

(Cranes, derricks, etc.)

POPOVICH, N.G., assistant

Investigating the stability of automatic control systems
for coal mining machinery with projected feeder parts.

Izv.vys.ucheb.zav.; gor.zhur. no.7:87-92 '60.
(MIRA 13:7)

1. Kiyevskiy ordena Lenina politekhnicheskii institut.
Rekomendovana kafedroy gornoy elektromekhaniki.
(Coal mining machinery) (Automatic control)

POPOVICH, N. G., Cand Tech Sci -- (diss) "Research into systems of automatic control of loading on coal-extracting machines with extracting feed drive." Kiev, 1960. 18 pp; with charts; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, Kiev Order of Lenin Polytechnic Inst); 160 copies; price not given; (KL, 25-60, 134)

POPOVICH, N. G., gornyy inzh.

Automatic control of the type UKR cutter-loader. Ugol' Ukr. 6
no.10:16-18 0 '62. (MIRA 15:10)

1. Kiyevskiy politekhnicheskii institut.

(Coal mining machinery) (Automatic control)

VINOSLAVSKIY, Vasiliy Nikolayevich, kand.tekhn.nauk,dots.;
RYBCHENKO, Petr Filimonovich, kand.tekhn.nauk,dots.;
POPOVICH, Nikolay Gavrilovich, kand.tekhn.nauk,dots.;
POLYANSKIY, Nikolay Alekseyevich, inzh.; DANIL'CHUK,
Grigoriy Ivanovich, inzh.; VOLOTKOVSKIY, S.A., doktor
tekhn. nauk, prof., retsenzent; MIROSHNIK, A.M., kand.
tekhn. nauk, retsenzent; DENISENKO, S.A., inzh.,
retsenzent

[Automation of industrial processes in coal mines] Avto-
matizatsiia proizvodstvennykh protsessov ugol'nykh shakht.
[By] V.N.Vinoslavskii i dr. Kiev, Tekhnika, 1964. 406 p.
(MIRA 18:3)

POPOVICH, N.G., kand.tekhn.nauk; LEPORSKIY, V.D., inzh.

Maximum form of automation of coal mining machines. Izv.vys.ucheb.
zav.; gor.zhur. 5 no.9:120-123 '62. (MIRA 15:11)

1. Kiyevskiy ordena Lenina politekhnicheskii institut. Rekomendovana
kafedroy elektrifikatsii i avtomatizatsii gornyykh predpriyatiy.
(Coal mining machinery) (Automatic control)

POPOVICH, N.G., kand. tekhn. nauk; BAZILEVICH, P.A., inzh.

Dynamics of an automatic control system of mine hoisting machinery
with a magnetic power amplifier. Izv. vys. ucheb. zav.; gor. zhur.
7 no.11:153-160 '64. (MIRA 18:3)

1. Kiyevskiy politekhnicheskii institut. Rekomendovana kafedroy
avtomatizatsii gornoy promyshlennosti.

POPOVICH, N.G., inzh.

Equating the movements of coal mining machines with remote feed
drive and their characteristics in steady work conditions. Izv.
vys.ucheb.zav.; gor.zhur. no.10:76-81 '59.
(MIRA 13:5)

1. Kiyevskiy politekhnicheskiy institut.
(Coal mining machinery)

POPOVICH, N.G., inzh.

Automatic feed drive of two-motor coal mining machines. Ugol' Ukr.
4 no.10:20-21 O '60. (MIRA 13:10)

(Coal mining machinery--Electric driving)
(Automatic control)

L'VOV, K.A.; POPOVICH, N.I.; SERGIYEVSKIY, V.M.; KONDIAYN, O.A.;
SPEPANOV, D.L.; GORSKIY, V.P.; BOYTSOVA, Ye.P.; BOGRETSOVA,
T.B.; GORSKIY, I.I., *otv. red.*; YEYSEYEV, K.P., *otv. red.*;
KRASNOV, I.I., *red.*; POKROVSKAYA, I.M., *red.*; DERZHAVINA, N.G.,
red. izd-va; GUROVA, O.A., *tekhn. red.*

[Resolutions of the Interdepartmental Conference on Working
out of Unified Stratigraphic Schemes for the Urals] Reshenia
mezhvedomstvennogo soveshchaniia po razrabotke unifitsirovan-
nykh stratigraficheskikh skhem dlia Urala. Rassmotreno i ut-
verzhdeno Mezhhvedomstvennym stratigraficheskim komitetom 9 fev-
ralia 1960 g. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po
geol. i okhrane neдр, 1961. 50 p. (MIRA 15:2)

1. Soveshchaniye po unifikatsii stratigraficheskikh skhem
Urals i po sootnosheniyu drevnikh svit Urals i Russkoy plat-
formy, Sverdlovsk, 1956.
(Ural Mountains--Geology, Stratigraphic)

MALASHEVSKIY, V.N.; POPOVICH, N.I.

Structural-facies zones in the Cambrian of the Arctic and sub-
arctic Urals. Mat. VSEGEI no.67:81-94 '61. (MIRA 15:12)
(Ural Mountain region—Geology)

L³VOV, K.A., POPOVICH, N.I.

Paleogeography and facies of the Ural Cambrian (Kara-Tau complex).
Mat.VSEGEI.Ob.ser. no.28:45-50 '60. (MIRA 14:6)
(Kara-Tau---Geology, Stratigraphic) (Kara-Tau---Paleogeography)

COUNTRY : USSR
CATEGORY : Plant Diseases. Cultivated Plants. 0
ABS. JOUR. : RZhSiol., No. 3, 1959, No. 11293
AUTHOR : Tselle, M. O., Skatins'ka, O. I., Popovich, N. S.
INST. : -
TITLE : Control of the Viral Diseases of Tomatoes.
ORIG. PUB. : Kolgospnik Ukraini, 1958, No. 6, 35
ABSTRACT : No abstract.

CARD: 1/1

MATVIYENKO, V.K.; POPOVICH, N.V.

The ODTSG-135000/500 transformer. Biul.tekhn.-ekon.inform. no.12:
28-31 '60. (MIRA 13:12)
(Electric transformers)

POPOVICH, P., podpolkovnik, letchik-kosmonavt SSSR, Geroy Sovetskogo
Soyuza

A road to the sky (to be continued). Av. i kosm. 45 no.9:77-80
'62. (MIRA 15:10)

(Popovich, Pavel Romanovich, 1930-)

POPOVICH, P.[Popovich, P.], letchik-kosmonavt SSSR; KELDYSH, M.V.

April 12th, Astronautics Day. Znan. ta pratsia no.4:12 Ap '63.
(MIRA 16:6)

1. Prezident AN SSSR (for Keldysh).
(Astronautics)

POPOVICH, P., letchik-kosmonavt, Geroy Sovetskogo Soyuza

Space reveals its mysteries. Grazhd.av. 20 no.4:2-3 Ap '63.
(MIRA 16:5)

(Outer space--Exploration)

ACCESSION NR: AN3001198

S/8008/63/000/140/0002/0002

AUTHOR: Popovich, P. (Pilot-Cosmonaut); Kovalev, S. (Lt. Colonel)

TITLE: The celestial journey continues

SOURCE: Krasnaya zvezda, 15 Jun 63, p. 2, cols. 3-6

TOPIC TAGS: Vostok-5; second day of flight

TEXT: The indication cited in a previous report (SPA0-4) that Popovich was in a tracking station in or near Moscow during the launch and flight of Vostok-5 is supported to some degree in this source. Discussing the second day of the flight, the authors state, "In the late evening, the Vostok-5 again flew over the capital of our Motherland. Warm greetings were transmitted from the control point to the ship."

SPA0 - Item no. 9

DATE ACQ: 19Jun63

Card 1/1

Card 1/1

UDC: none

ACCESSION NR: AN3001193

S/9008/63/000/140/0002/0002

AUTHOR: Popovich, P. (Pilot-cosmonaut)

TITLE: Onward, motherland

SOURCE: Krasnaya zvezda, 15 Jun 63, p. 2, col. 5-7

TOPIC TAGS: Popovich's voice contact with Bykovskiy

TEXT: From a previous report (SPAO-1) it is known that at the time of the Vostok-5 launch Popovich was in Moscow, from where he carried on voice contact with Bykovskiy. The present source indicates that this was a tracking station: "We are reporting from one of the control points. The last moments before launch are passing." It is also indicated that, besides Popovich and Kovalev, members of the State Commission [in charge of the manned flight program], the directors of the control group, and other scientists were present in the room.

SPAO - Item no. 4

DATE ACQ: 18Jun63

Card 1/1

NIKOLAYEV, A., mayor, letchik-kosmonavt, Geroy Sovetskogo Soyuz;
POPOVICH, P., podpolkovnik, letchik-kosmonavt, Geroy Sovetskogo
Soyuz

Around the earth 112 times. Av. i kosm. 45 no.9:71 '62.
(MIRA 15:10)

(Space flight)

POPOVICH, P., podpolkovnik, letchik-kosmonavt SSSR, Geroy Sovetskogo
Soyuza

In a supersonic fighter. Av. i kosm. 45 no.11:21-25
'62. (MIRA 15:11)
(Popovich, Pavel Romanovich, 1930-)

POPOVICH, P., podpolkovnik, letchik-kosmonavt SSSR, Geroy Sovetskogo
~~Soyuza~~

Sonic barrier (to be continued). Av.i kosm. 45 no.10:26-30 '62.
(MIRA 15:10)

(Popovich, Pavel Romanovich, 1930-)

POPOVICH, P. [Popovich, P.], inzh.

Extending production of local building materials. Sil'.bud.
7 no.12:14 D '57. (MIRA 13:5)

1. Cherkasskoye oblastnoye upravleniye po stroitel'stvu v
kolkhozakh.

(Cherkassy Province--Building materials)

POPOVICH, P., inzh.

Mechanized brick factories in Cherkassy Province. Sel'. stroi. 12
no.2:20 F '58. (MIRA 11:2)

1. Cherkasskoye oblastnoye upravleniye po stroitel'stvu v kolkho-
zakh USSR.

(Cherkassy Province--Brick industry)

POPOVICH, P., podpolkovnik, Geroy Sovetskogo Soyuz, letchik-
kosmonavt SSSR, zasluzhennyy master sporta

Our starting area. Kryl.rod. 13 no.11:2 N '62. (MIRA 15:12)
(Air pilots)

POPOVICH, P.

Soviets of workers' deputies and trade unions. Sov. profsoiuzy 7
no. 7:13-18 J1 '58. (MIRA 11:8)

1. Predsedatel' Kiyevskogo oblastnogo soveta profsoyuzov.
(Kiev Province--Politics and government)
(Trade unions)

BRZHESKIY, V. (g. Tikhvin); POPOVICH, P. (g. Yaroslavl'); BLAGOVESHCHENSKIY, M.
(g. Ivanovo)

Veniamin Petrovich Manuilov; on the 45th anniversary of his medical
activities. Vest.khir. 83 no.8:152-153 Ag '59. (MIRA 13:1)
(MANUILOV, VENIAMIN PETROVICH)

L 08700-67 FCS-2/EWT(1)/EEC(k)-2 IJP(c) JGS/TT/ENS/GW

ACC NR: AP7001638

SOURCE CODE: UR/0209/66/000/003/0026/0028

AUTHOR: Popovich, P. (Cosmonaut; Hero of the Soviet Union)

ORG: none

TITLE: Earth from orbit

SOURCE: Aviatsiya i kosmonavtika, no. 8, 1966, 26-28

TOPIC TAGS: meteorologic satellite, satellite photography/Molniya-1 meteorologic satellite

ABSTRACT: Cosmonaut P. Popovich writes as follows in this brief article on the earth as viewed from space: "The development of various systems of photographic and television equipment for spaceships is opening up new possibilities for the activity of man in space. We examined the photographs of the surface of our planet taken from the third satellite of the 'Molniya-1' system with great interest. A photograph taken with a long focal length objective shows the territory of the northern hemisphere: the Arctic Ocean, the northern part of the Atlantic Ocean, part of Europe and Asia. Comparing these photographs with what we observed from the 'Vostok' spaceships, it can be said that from heights of 30,000-40,000 km it is easy to observe the formation and movement of large

Card 1/2

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L 08700-67

ACC NR: AF7001638

cloud systems, cyclones and anticyclones....On photographs taken from orbits at heights of 200-500 km it is possible to distinguish small details of the cloud cover and the earth's surface and determine the character of vegetation. Specialists believe that in the not distant future artificial earth satellites will be used to detect areas of agricultural crops suffering from diseases (infrared methods probably will be used for this purpose), to determine the configuration of glaciers, which will be useful in forecasting the balance of fresh water in a number of regions of the earth, and in detection of underground rivers, using instruments recording the temperature difference over the stream and in adjacent regions". (A photograph of the earth taken by "Molniya-1" from an altitude of 30,000-40,000 km accompanies the text.) Orig. art. has: 3 figures. [JPRS: 38,230]

SUB CODE: 22, 04 / SUBM DATE: none

Card 2/2 not

POPOVICH, P. P.

PA-75T75

USSR/Medicine - Refrigeration
Medicine - Cold, Therapy

May/Jun 1948

"Further Modification of a Simplified Method of
Freezing Histological Tissues," P. P. Popovich, Chair
of Path Anat, Yaroslavl Med Inst, 1 p

"Arkhir Patologii" Vol I, No 3

In "Arkhir Patologii" No 1 and 2, 1946, author de-
scribed simplified method of freezing tissue specimens,
using a freezing mixture of ice/snow and cooking salt
instead of carbon dioxide. Present article describes
modification of this apparatus which enables entire
object to be cooled evenly. Apparatus has been placed
in mass production.

75T75

POPOVICH, P.P.

Case of helminthic abscess. Khirurgia no.3:85-86 Mr '54. (MLRA 7:5)

1. Iz Yaroslavskogo meditsinskogo instituta.

(ABSCCESS,

*hip, ascaris containing abscess)

(HIP, abscess,

*Ascaris containing abscess)

(ASCARIASIS,

*Ascaris containing hip abscess)

POPOVICH, P.P.

On the history of goiter research; according to data on the Academy
of Chinese Popular Medicine. Probl.endok. i gorm. 5 no.4:105-107
Jl-Ag '59. (MIRA 13:2)

1. Iz kafedry patologicheskoy anatomii (zaveduyushchiy - prof. N.Ye.
Yarygin) Yaroslavskogo meditsinskogo instituta.
(GOITER hist.)

S/026/63/000/001/001/007
A004/A126

AUTHORS: Nikolayev, A. G., Popovich, P. R., Astronauts of the USSR, Heroes
of the Soviet Union

TITLE: How does the Earth look from outer space?

PERIODICAL: Priroda, no. 1, 1963, I - IV

TEXT: The two Soviet astronauts give a description of how the Earth looked from their space-ships and present a number of colored photos of coast lines, rivers, mountains and the boundary between day and night, taken during the flight. They point out that continents and oceans were clearly to distinguish, that the relief of the continents could be made out distinctly, even the single ridges of mountainous massives, such as the Tyan-Shan' and Himalaya. They saw from above thunderstorms and lightnings and could see the difference between cumulus and stratus clouds. When the space ship came out of the Earth's shadow, the horizon was rather contrasting, while nearer to the sun, the contrast was less pronounced. In looking down vertically, the colors appeared nearly in the same way as on Earth. The authors conclude in commenting on the possibilities of utilizing the results of these observations for further astronomical flights.

Card 1/2

DELONE, N.L.; POPOVICH, P.R.; ANTIPOV, V.V.; VYSOTSKIY, V.G.

Effect of cosmic flight factors in the satellite-spacehips
"Vostok-3" and "Vostok-4" on microspores of Tradescantia
paludosa. Kosm. issl. 1 no.2:312-325 S-O '63. (MIRA 17:4)

ACCESSION NR: AT4042674

S/0000/63/000/000/0149/0153

AUTHOR: Delone, N. L.; Popovich, P. R.; Antipov, V. V.; Vysotskiy, V. G.

TITLE: Alterations in mitotic activity following space flights

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963.
Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy konferentsii. Moscow, 1963, 149-153

TOPIC TAGS: microspore, spaceflight effect, mitotic activity, Tradescantia paludosa, Vostok 3, Vostok 4

ABSTRACT: Tradescantia paludosa microspores were cultivated in special biological cartridges on Vostok 3 and Vostok 4 to determine how conditions of space flight affect mitotic processes. In one experiment on Vostok 4, P. R. Popovich fixed cultures after an orbiting time of 56 hours. In two other tests, cultures were examined 18 and 48 hours after re-entry. Significant alterations in mitotic processes were observed as a result of exposure to conditions of space flight. The authors suggest that the basic mechanism of these alterations must have been weightlessness because other experiments have shown that gravitational forces and

Card

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ACCESSION NR: AT4042674

radiation doses higher than those encountered during space flights are required to produce mitotic aberrations.

ASSOCIATION: none

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: L8

NO REF SOV: 000

OTHER: 000

Gord

2/2

DELONE, N.L.; POPOVICH, P.R.; ANTIPOV, V.V.; VYSOTSKIY, V.G.

New types of chromosome rearrangements in the microspores of *Tradescantia paludosa* under the influence of certain factors during spaceship flights. Dokl. AN SSSR 152 no.5:1227-1230 0 '63.
(MIRA 16:12)

1. Predstavleno akademikom N.M.Sisakyanom.

*

NIKOLAYEV, A. G., letchik-kosmonavt SSSR, Geroy Sovetskogo Soyuz;
POPOVICH, P. R., letchik-kosmonavt SSSR, Geroy Sovetskogo
Soyuza

What does earth look like from space? Priroda 52 no.1:I-IV
'63. (MIRA 16:1)

(Astronautics) (Earth—Surface)

NIKOLAYEV, A.G., letchik-kosmonavt; POPOVICH, P.R., letchik-kosmonavt

We lived and worked in outer space. Priroda 51 no.9:10-16 S
'62. (MIRA 15:9)

(Astronautics)

POPOVICH, P. R., Geroy Sovetskogo Soyuz, letchik-kosmonavt SSSR

The first Soviet team in space. Av. 1 kosm. 45 no.9:49-51
'62. (MIRA 15:10)

(Space flight)
(Nikolaev, Andrian Grigor'evich, 1929-)
(Popovich, Pavel Romanovich, 1930-)

POPOVICH, P.V., starshiy nauchnyy sotrudnik

Technology of cableway skidding of timber in mountains of Siberia.
Trudy VSNIPILesdrev no.5:15-19 '62. (MIRA 16:5)
(Krasnoyarsk Territory--Lumber--Transportation)

h1654

S/C58/62/000/010/073/093
A061/A101

1-11
AUTHORS: Dovgoshey, N. I., Chepur, D. V., Popovich, P. Yu.
TITLE: Dependence of the degree of photosensitivity of mercuric iodide samples on the frequency of an applied external field
PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1962, 45, abstract 10E349 ("Dokl. i soobshch. Uzhgorodsk. un-t. Ser. Fiz.-matem. n.", 1961, no. 4, 52 - 53)
TEXT: It is shown that the sensitivity of mercuric iodide photoresistance cells fed by alternating voltage exceeds by several times their sensitivity in the case of constant voltage feeding. The explanation is that an alternating field does not permit the formation of a space charge that would lead to sample polarization.

[Abstracter's note: Complete translation]

Card 1/1

GAGARIN, Yuriy, letchik-kosmonavt, Geroy Sovetskogo Soyuza, podpolkovnik;
TITOV, German, podpolkovnik, letchik-kosmonavt; NIKOLAYEV, Andriyan,
mayor, letchik-kosmonavt; POPOVICH, Pavel, podpolkovnik, letchik-
kosmonavt

Two space years. Av.i kosm. 45 no.4:2-4 Ap '63. (MIRA 16:3)
(Space flight)

YUGOSLAVIA/General Problems of Pathology - Experimental Therapy. U-3

Abs Jour : Ref Zhur - Biol., No 16, 1958, 75506

Author : Popovich, Radiveje; Rosic, Dragoslav; Putnik, Milan

Inst : -

Title : New Cytostatic Drug E-39.

Orig Pub : Med. glasnik, 1957, 11, No 5, 191-194

Abstract : No abstract.

Card 1/1

POPOVICH, RADIVOJE

YUGOSLAVIA/Human and Animal Physiology - Internal Secretion. V-7

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18433
 Author : Radivoje Popovich, Dragoslav Rosich, and Milan Putnik
 Inst : -
 Title : Sulfamides as Hypoglycemic Agents.
 Orig Pub : Sposki arkhiv tselok. lekar., 1957, 815, No 2, 211-227
 Abstract : No abstract.

Card 1/1

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001342510006-9" K-5

Abs Jour : Ref Zhur - Biol., No 5, 1958, 20159
 Author : Popovich, S., Tot, E.
 Inst : -
 Title : The Effect of Heteroauxine on the Seedlings of the Scotch and Austrian Pines.
 Orig Pub : Rev. padurilor, 1956, 71, No 3, 177-179
 Abstract : Six day old seedlings of Pinus silvestris were subjected to a 48 hour treatment with solutions of heteroauxine in the following concentrations: 0.2, 0.1, 0.05, 0.02 and 0.01%. It was found that only in the variant having the 0.01% concentration of heteroauxine was there no plant loss. This indicates that the concentration specified is the closest to the maximum allowing viability in the seedling sprouts. In repeated tests with sprouts of P. silvestris and P. nigra the treatment with heteroauxine concentrations of 0.02-0.002% lasted 5 hours.

Card 1/2

NEDIN, V.V.; GEL'MAN, D.Z.; POPOVICH, S.P.; FRENKEL', F.Z.; FROLOV, N.S.

Ways of improving the ventilation of shafts and blocks in
working layers in double levels. Sbor.nauch.trud.Kriv.fil.
IGD AN URSR no.1249-57 '62. (MIRA 16:4)
(Krivoy Rog Basin--Mine ventilation)

GEL'MAN, D.Z.; POPOVICH, S.P.; FRENKEL', F.Z.; FROLOV, N.S.

Dust formation during scraper haulage of ore. Bor'ba s sil.
5:174-177 '62. (MIRA 16:5)

1. Krivorozhskiy filial Instituta gornogo dela AN UkrSSR.
(Mine ventilation) (Ore handling)

POPOVICH, S.P.

Study of hydraulic control of the dust in the air during
secondary crushing by the blasting method. Sbor.nauch.trud.Kriv.
fil.IGD AN URSR no.1:25-31 '62. (MIRA 16:4)
(Mine dusts—Prevention) (Blasting)

POPOVICH, S.P.

Study of dust-free ventilation of working areas in scraper
galleries. Sbor.nauch.trud.Kriv.fil.IGD AN URSR no.1:71-88
'62. (MIRA 16:4)

(Mine dusts)

BOGACHEVSKIY, V.S., inzh.; POPOVICH, S.P., RYABOV, S.Ye.

Ways of improving labor conditions in ore haulage. Bezop. truda
v prom. 8 no.11:15-18 N '64. (MIRA 18:2)

1. NIImetallurgventilyatsiya (for Bogachevskiy, Popovich).
2. Glavnyy inzh. shakhty im. Frunze Kirvorozhskogo basseyna
(for Ryabov).

NIKITIN, I.P., inzh.; POPOVICH, S.P., inzh.; TADULEV, V.S.; STETSUN, A.

Controlling dust and gases in haulageway galleries. p. 1
v prom. 5 no. 11:10-12 I '61. (MIN)

1. Privorot'skiy filial Instituta gornogo dela AN SSSR (for
Nikitin, Popovich). 2. Nachal'nik pyleventilyatsionnoy sluzhby
shakhty "TSentral'naya" (for Tadulev). 3. Otdel tekhnicheskoy
bezopasnosti trosta Lomruda (for Stetsun).
(Mining engineering--Safety measures)

BOGACHEVSKIY, V.S.; POPOVICH, S.P.; TYUKH, I.I.

One of the potentials for increasing labor productivity in the
haulage of ore in Krivoy Bog Basin mines. Met. i gornorud.
prom. no. 2:51-52 Mr-Ap '64. (MIRA 17:9)

CHAYEVSKIY, M.I.; SHATINSKIY, V.F.; POPOVICH, V.V.

Thermomechanical treatment of stress raisers by means of roll edging.
Vliian. rab. sred na svcis. mat. no.3:75-84 '64.

(MIRA 17:10)

L 32058-65 ENT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(b) Pf-4 MJW/JD/HW

ACCESSION NR: AT4049942

S/2723/64/000/003/0075/0084

AUTHOR: Chayevskiy, M.I. (Candidate of technical sciences); Shatinskiy, V.F.; Popovich, V.V.

36
35
B+1

TITLE: Thermomechanical treatment of stress concentrators by rolling with rollers

SOURCE: AN UkrSSR. Fiziko-mekhanicheskiy institut. Vliyaniye rabochikh sred na svoystva materialov, no. 3, 1964, 75-84

TOPIC TAGS: thermomechanical treatment, strain hardening, stress concentrator, rolling, steel strength, steel rolling, torsional deformation, steel 2Kh13, steel 40Kh

ABSTRACT: A method is suggested for strengthening steel at the stress concentrators by thermomechanical treatment consisting of heat treatment, in-rolling of material at the stress concentrators and partial strain hardening of the test piece (e.g. by overall torsional deformation). The main aspect studied in the present paper is the strengthening of steel at the stress concentrators by rolling under optimum conditions. Tests were carried out on cylindrical specimens of steel 2Kh13 and steel 40Kh, in the middle of which there was a stress-concentrating groove with a depth of 1 mm, a bottom radius of 0.2 mm and an angle of 46°. During thermomechanical treatment, the depth of the groove was increased to 1.5 mm by in-rolling with a 20 mm diameter roller that left

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ACCESSION NR: AT4049942

the bottom radius and groove angle unchanged. The rolling temperature was 500-600C, depending on the type of steel, and some samples were also subjected to torsional deformation. Samples were tested in air and also after coating by immersion into a molten eutectic alloy of lead and tin. Optimum thermomechanical treatment resulted in marked increases in strength at the stress concentrators, as evidenced by failures of the samples through the unnotched diameters. Rolling-in at room temperature, however, had no significant effect. The authors conclude that optimum thermomechanical treatment of parts with stress concentrators, which may be semi-finished products, yields parts with increased uniform strength without excessive deformation. For some steels, corrosion resistance is also improved, but if the plasticity of the steel is too low, there may be no beneficial effect. As shown by the results with steel 2Kh13, not all steels can be strengthened by thermomechanical treatment, even if the deformation is carried out in the high stability region of the austenite.

18

ASSOCIATION: none

SUBMITTED: 06Jun63

ENCL: 00

SUB CODE: MM

NO REF SOV: 015

OTHER: 001

Card 2/2

L 26039-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t) IJP(c) JD

ACC NR: AP6013898

SOURCE CODE: UR/0020/66/167/006/1287/1290

AUTHOR: Chayevskiy, M. I.; Shatinskiy, V. F.; Popovich, V. V.

ORG: Institute of Physics and Mechanics, Academy of Sciences, UkrSSR (Fiziko-mekhanicheskiy institut Akademii nauk UkrSSR)

TITLE: Adsorption reduction in the work capacity of steel specimens in contact with a melt, and the effect of gaseous impurities

SOURCE: AN SSSR. Doklady, v. 167, no. 6, 1966, 1287-1290

TOPIC TAGS: steel, fatigue strength, steel impurity, *metal test, material deformation*

ABSTRACT: The authors consider the long-term strength of various types of steel in lead-tin and lead-bismuth melts as contrasted with their strength in air and in a vacuum. Tests show that the long-term strength of Armco iron specimens is higher in air than in a vacuum. Tests in vacuum show less scatter in experimental data since the development of microscopic cracks in a vacuum is more uniform than this process in air. The durability of specimens in a melt is lower than in a vacuum since reliable wetting of the specimens by the melt before the tests is prevented by the formation of an oxide film on the surface of the specimens. For this reason, the oxygen from the melt penetrates easily into the steel. However, when the tests are conducted in a vacuum, the long-term strength of steel specimens in the melt is nearly the same as that of

UDC: 669.1.539.(431+434)

Card 1/2

L 26039-66

ACC NR: AP6013898

specimens in a vacuum up to a certain stress level. ² Above this critical stress, the melt penetrates into the metal causing embrittlement and a reduction in the short-term strength. The effect of oxygen in cyclic deformation of steel in melts is considered. It is found that the intermetallic films formed on the surface of steel by contact with the melt makes an effective barrier which protects the specimen from oxygenation. Orig. art. has: 4 figures.

SUB CODE: 11/

SUBM DATE: 27Jul65/

ORIG REF: 007/

OTH REF: 000

Card 2/2 PB

14427-66 EWT(m)/EWP(w)/EPT(n)-2/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) IJP(c)
ACC NR: AP6002111 MJW/JD/WW/SOURCE CODE: UR/0369/65/001/006/0654/0658

87
86

JG
AUTHOR: Chayevskiy, M.I.; Shatinskiy, V.F.; Popovich, V.V.

ORG: Physicomechanical Institute, AN Ukr SSR, L'vov (Fiziko-mekhanicheskiy institut AN Ukr SSR)

TITLE: Role of oxygen in the adsorptive decrease of the strength of steel samples in contact with melts 21

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 6, 1965, 654-658

TOPIC TAGS: oxygen, steel, adsorption, fatigue strength, lead, bismuth, tin, nonferrous liquid metal

ABSTRACT: Cyclic deformation of steels in melts considerably intensifies the diffusion processes involved in the penetration of the melt or impurities into the steel. The role of oxygen in these processes was studied on 40Kh and 1Kh18N9T steels. The fatigue strength of temper-hardened 40Kh steel in the melt of the lead-bismuth eutectic in contact with air exhibited a substantial drop, whereas in the presence of argon and absence of air this drop did not occur. In melts of the Pb-Sn and Pb-Bi eutectics, the dissolved

27 27 27 18

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L 14427-66

ACC NR: AP6002111

oxygen had no effect on the fatigue strength of this steel. In the Pb-Bi melt, steel 1Kh18N9T, which has a greater affinity for oxygen than this melt, becomes saturated with oxygen coming from the melt, which in turn absorbs oxygen from the air. In the presence of a purified argon atmosphere, the oxygenation ceases, and the fatigue strength of the samples increases. Hence, both the melt and the oxygen dissolved in it participate in the adsorptive decrease of the strength of 1Kh18N9T steel in the Pb-Bi melt, which is in contact with air. In the Pb-Sn eutectic melt, intermetallic films formed on the surface of the steel act as a barrier protecting the steel from oxygen. It is concluded that in order to prevent the negative role of oxygen in reducing the strength of steels by adsorption, it is necessary either to use melts which form surface intermetallic films with the steel, or to alloy the melt with additional components which increase the affinity of the melt for oxygen, or to protect the melt from the action of oxygen. Orig. art. has: 5 figures.

SUB CODE: 07, 11 / SUBM DATE: 20Jun85 / ORIG REF: 008

Card 2/2

POPOVICH, V.V.; SHATINSKIY, V.F.; KONDRATENKOV, I.V.; CHAYEVSKIY, M.I.

Remodeling the MP-4G type machine for the purpose of conducting mechanical testing in vacuum or in an atmosphere of gases. Fiz.-khim. mekh. mat. 1 no.5:596-600 '65. (MIRA 19:1)

1. Fiziko-mekhanicheskiy institut AN UkrSSR, L'vov. Submitted April 17, 1965.

ACC NR: AP6034192 EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/JG

SOURCE CODE: UR/0369/66/002/005/0522/0525

AUTHOR: Chayevskiy, M. I.; Popovich, V. V.

ORG: Physicomechanical Institute, AN UkrSSR, Lvov (Fiziko-mekhanicheskiy institut AN UkrSSR)

TITLE: Preventing hydrogen embrittlement in parts coated with lithium during their rinsing in various solutions

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 5, 1966, 522-525

TOPIC TAGS: ~~metal~~ hydrogen embrittlement, iron, ~~embrittlement~~, molybdenum ~~embrittlement~~, lithium, ~~coated metal~~ *coating, lithium*

ABSTRACT: Rinsing with water is an easy and economical method of cleaning parts working in contact with lithium, which have to be cleaned periodically. Water, however, reacts with lithium, producing atomic hydrogen, which readily diffuses into the metal and lowers its strength and, especially, its ductility. There are two ways of preventing the detrimental effect of hydrogen: use materials which are not susceptible to hydrogen embrittlement, or prevent hydrogen diffusion. It was established earlier that metals which form ideal solutions with hydrogen or solutions with a negative deviation from ideal ones are not susceptible to hydrogen embrittlement. Iron and molybdenum form solutions with positive deviation from the ideal, while niobium-hydrogen solutions show a negative deviation. Consequently, niobium is

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ACC NR: AP6034192

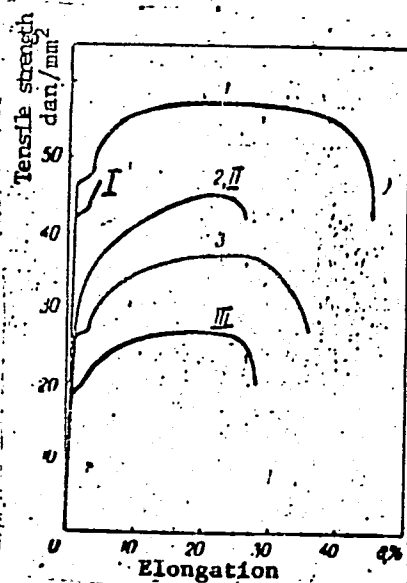


Fig. 1. Stress-strain diagram of molybdenum (1, I), niobium (2, II) and Armco iron (3, III) uncoated (1, 2, 3) and coated with lithium and rinsed with water (I, II, III)

Card 2/3

L 07794-67

ACC NR: AP6034192

not susceptible to hydrogen embrittlement, while molybdenum and iron are very susceptible (Fig. 1). The diffusion of hydrogen can be prevented by the use of rinsing media containing some strong oxidizers. For instance, a 30% aqueous solution of hydrogen peroxide prevents completely the adsorption of hydrogen by iron. This solution, however, is too strong for molybdenum, especially when intricately shaped parts must be rinsed. Molybdenum can be rinsed in potassium bichromate or potassium permanganate. Orig. art. has: 3 figures and 1 table.

SUB CODE: 11, 13/ SUBM DATE: 10May66/ ORIG REF: 005/ ATD PRESS: 5101

LS

Card 3/3

ACCESSION NR: AP4009646

S/0147/63/000/004/0079/0085

AUTHOR: Popovich, V. Ye.

TITLE: Application of the method of successive approximations to problems on plate rigidity

SOURCE: IVUZ. Aviatcionnaya tekhnika, no. 4, 1963, 79-85

TOPIC TAGS: plate rigidity, plate rigidity calculation, successive approximation method, critical force magnitude

ABSTRACT: A procedure for reducing the problem of the characteristic values of differential equations with variable coefficients to an algebraic equation relative to an unknown parameter is employed to determine the critical force magnitudes. The proposed method was used to obtain a general solution

$$u = \sum_{p=1}^r c_p \left[\frac{x^{\mu-1}}{(\mu-1)!} + \sum_{n=1}^{\infty} u_p^{(n)} \right]. \quad (1)$$

to the initial linear differential equation

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ACCESSION NR: AP4009646

$$u^{(r)} = \sum_{i=0}^r p_i(x) \cdot u^{(i)}, \quad (2)$$

where $\mu^{(+)}$ and $\mu^{(i)}$ are derivatives of series r and i from an unknown function u ($r > t$); $p_i(x)$ are variable coefficients, continuous for the interval $[0, x]$; the subscript μ indicates the number of the fundamental function and the superscript n in $u_{\mu}^{(n)}$ designates the number of successive approximations completed to obtain the general solution. Further analysis illustrates the uniform convergence of the series comprising the solution. Three practical examples show divergencies from an accurate solution of the posed problem of 0.3, 0.9 and 2.5%, respectively. Orig. art. has: 1 graph, 34 formulas.

ASSOCIATION: None

SUBMITTED: 04Jan63

DATE ACQ: 12Feb64

ENCL: 00

SUB CODE: AP

NO REF SOV: 005

OTHER: 000

Card 2/2

RUMANIA / Microbiology. Microorganisms Pathogenic to Humans
and Animals.

Z-3

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 33803

Author : Popovich, Vlad-Segli

Inst : Not given

Title : Experiments on the Changes in Agglutinating and Hemolytic
Serum Titers in Relation to the Time of Their Preparation
and Their Storage Conditions.

Orig Pub : Microbiol., parazitol. si epidemiol., 1957, 2, No 4, 354-
358.

Abstract : No abstract.

Card 1/1

IGNJACEV, Zivojin; JEVTIC, Zivojin; NIKULIN, Aleksandar; POPOVIC, Vojin

Lymphogranulomatosis of the hypophysis with diabetes insipidus and Simmonds' disease. Srpski arh. celok. lek. 87 no.12:1167-1170 D '59.

1. Patolosko-anatomski institut Medicinskog Fakulteta Univerziteta u Sarajevu, Upravnik: prof. dr Zivojin Ignjacev; II Interna klinika Medicinskog fakulteta Univerziteta u Sarajevu, Upravnik: prof. dr Miron Simic.

(SIMMONDS DISEASE compl.)

(HODGKIN'S DISEASE compl.)

(PITUITARY GLAND neopl.)

(DIABETES INSIPIDUS compl.)

GALIAPIN, Vasiliy Tikhonovich; SHCHERBAKOV, Sergey Aleksandrovich;
POPOVICH, V.D., red.; LUCHKIV. M.R., tekhn. red.

[Tourists in the Carpathian Mountains; guidebook] Turisty v
Karpatakh; ~~patev~~tevoditel'. Uzhgorod, Zakarpatskoe knizhno-
gazetnoe izd-vo, 1962. 172 p. (MIRA 16:1)
(Carpathian Mountains---Guidebooks)

S/735/61/000/000/003/014

AUTHORS: Chayevskiy, M. I., Popovich, V. V., Karpenko, G. V.

TITLE: A machine for the investigation of elastic-plastic torsional deformations.

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut mashinovedeniya i avtomatiki. Mashiny i pribory dlya ispytaniy metallov. Kiyev, 1961, 19-25.

TEXT: The design of a machine for torsional testing of steel specimens at high temperatures (T), in contact with various fluid media, and with large cyclic deformations, is described. Test data for normalized steel "50" at room temperature are adduced. The machine was developed to provide an experimental means for a determination of whether or not to include cyclically alternating torsional-stress conditions implying elastic-plastic deformation as reasonable design conditions for certain power-plant elements, such as tubes and boilers, which may undergo a relatively small number of such cycles in their operational life span. The vertically oriented specimen is clamped rigidly at its lower end. The upper, rotatable, strain-gage-dynamometer clamp is twisted by a 0.6-kw, 1410 rpm, reversible electric motor via a two-stage $1:30 \times 1:64 = 1:1920$ worm-gear train (angular rate - 4.6 rad/min). The angular travel of the clamp is measured by a rheochord. The motor-reversal switch is actuated by travel-limiting stops for fixed-deformation tests and

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reference.

S/735/61/000/000/005/014

AUTHORS: Maksimovich, G.G., Yanchishin, F.P., Popovich, V.V., Nagirnyy, S.V., Karpenko, G.V.

TITLE: Machines for micromechanical endurance testing under variable tension in various media.

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut mashinovedeniya i avtomatiki. Mashiny i pribory dlya ispytaniy metallov. Kiyev, 1961, 41-46.

TEXT: A machine is described in which inertial loading is used in the endurance testing of 1- to 3-mm dia microspecimens in various fluid media. Variable-tension testing methods are described, and test data reported on 1-mm dia steel-45 microspecimens in air, MC (MS) oil activated with 2% oleic acid, and a 3% watery solution of NaCl. Testing of microspecimens is attractive for the determination of the effect of environmental media on the static and cyclic fatigue strength of a material; in smaller specimens the ratio of the surface area to the cross-sectional area is greater than in large specimens. Testing machines for static microspecimen tests have been described elsewhere (cf. Roytman, I.M., Fridman, Ya.B. Mikromekhanicheskiy metod ispytaniya metallov - The micromechanical method of metals testing. Moscow. Oborongiz, 1950. Konoplenko, V.P., et al., Zavodskaya laboratoriya, v.25, no.1, 1959. Regel, V.R., et al., ibid.). Variable-load testing is well known for large specimens, but little has been done for the testing of 1- to 3-mm dia microspecimens because of the difficulties inherent in the over-all precision and especially the exact

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Machines for micromechanical endurance testing... S/735/61/000/000/005/014

centering required. In the authors' machine the specimen (surrounded by a beaker for tests in various fluid media) is suspended from an annular dynamometric holder equipped with surface wire strain gages. A prescribed weight, spring-suspended from the lower end of the specimen, constitutes the static tension load. Also suspended from the lower end of the specimen is a floating frame containing an eccentric weight which is flexible-shaft-driven by a 30-w d.c. motor at 3,000 to 10,000 rpm. A spring parallelogram attached to the vertical machine support absorbs any horizontal component of the vibration, and only the vertical component of the cyclic inertial load is borne by the specimen. A variable resistance in the feed circuit permits programmed variations in the inertial load. The strain-gage readings are taken on an MIO-2 (MPO-2) oscillograph. The annular dynamometer is precalibrated statically. The strain-gage signals are preamplified on a tensometric TV-6M (TU-6M) amplifier. All tests were made in tension only, the mean load (equal to the static load) was held constant or varied, and the inertial-load amplitude was held constant or varied. Test data on carbon steel "45" are reported. The static (or mean) tension was $\sigma_m = 29.3 \text{ kg/mm}^2$, the inertial load, with a frequency of 50 and 142 cps, was varied. Fatigue curves are shown. The fatigue limit at high stresses is found to be greater in fluid media than in air. At the 142-cps frequency the fatigue limit in air and in activated oil is attained at $2.5 \cdot 10^7$ cycles. There is no noticeable effect of the activated oil on the fatigue limit on the basis of 10^8

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L 39043-66 ENT(m)/EWP(w)/ENF(j)/T/EWP(t)/ETI IJP(c) JD/WW/JW/IG/WE/DJ/RM

ACC NR: AP6020909

SOURCE CODE: UR/0369/66/002/002/0143/0148

AUTHOR: Chayevskiy, M. I.; Popovich, V. V.

ORG: Physicomechanical Institute, AN UkrSSR, L'vov (Fiziko-mekhanicheskiy institut AN UkrSSR)

TITLE: Evaluation of the action of corrosive media on the basis of thermodynamics of forming solutions

SOURCE: Fiziko-khimicheskaya mekhanika materialov, v. 2, no. 2, 1966, 143-148

TOPIC TAGS: metal deformation, liquid metal, thermodynamic characteristic, corrosion

ABSTRACT: The main criterion determining the action of a metallic melt on a deformed structural metal is the thermodynamic activity of the solvent metal. It is shown that the softening or hardening of the metal can be evaluated from data on the heats of mixing, free energy and entropy changes in the system, changes in the crystallization temperature, and also from melting point diagrams and the electronic structure of the interacting atoms. A series of thermodynamic characteristics of metals, combined with atomic characteristics, thus permits one to predict the changes in the strength of a structural metal acted upon by a liquid metal medium. Furthermore, by introducing a third component into the binary system, one can effect certain desired changes in the strength of the structural metal. A table is given which lists data on the deviation of solutions from ideality for deformed metal - melt binary systems, and presents

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L 39043-66

ACC NR: AP6020909

changes in the mechanical properties of solid metals caused by metallic melts. Orig.
art. has: 1 table and 7 formulas.

SUB CODE: 11/ SUM DATE: 14Oct65/ ORIG REF: 014/ OTH REF: 003

Card 2/2MLP

S/735/61/000/000/010/014

AUTHORS: Chayevskiy, M. I., Popovich, V. V.

TITLE: Multiplex mechanical testing on МП-4Г (MP-4G) testing machines.

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut mashinovedeniya i avtomatiki. Mashiny i pribory dlya ispytaniy metallov. Kiyev, 1961, 90-94.

TEXT: A modification of the МП-4Г (MP-4G) machine is described, which affords a significant broadening of the scope of testing on a single machine. Short-term high-temperature tensile tests in air and in liquid-metal fusions are described, and test data, in air and in a Pb-Sn eutectic fusion, of specimens of 2X13 (2Kh13) and 1X18H9T (1 Kh18N9T) are set forth. The modification was inspired by the need for tensile-testing machines for high-temperature operation. A few simple modifications rendered the endurance-testing machine МП-4Г (MP-4G) usable for tensile testing with automatic recording of the $P=f(\Delta l)$ curve. The modification comprises the installation of a reduction-gear-equipped electric motor for the displacement of the upper clamp at a prescribed constant rate, a change in the method of holding the specimen, and a change in the design of the clamps. New linear-displacement transducers were made for elongation measurement. The lower end of the specimen is held by a short tube which is screwed from above into

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Multiplex mechanical testing ...

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the center of an internally water-cooled disk. Two dynamometer rods are screwed into the lower face of the same disk, with their lower ends fixed to the base of the machine. The upper end of the specimen is clamped into the upper traction member of the machine. A disklet is screwed to the upper end of the specimen and a thin feeler rod is screwed through the hollow of the lower holder tube; the lower feeler rod and three feeler rods emanating from the upper disklet provide the two mechanical references for a rheostatic measurement of the elongation of the effective test segment of the specimen. A rack-and-pinion-driven rheochord transducer serves for large plastic deformations ($\Delta l = 50$ mm). For small elastic-plastic deformations of the order of 0.5-1.0 mm the relative longitudinal displacements of the central (lower-end) feeler rod and the three outer (upper-end) feeler rods serve to evaluate an initially circular annular spring equipped with surface wire strain gages. Similarly, annular dynamometer springs with wire strain gages can be used for more sensitive force measurements in lieu of the above-mentioned dynamometer rods. The force and elongation signals are fed to a standard compensation-type potentiometric recorder similar to that used on the micromechanical testing machine of the *ИРМ-0,2-МИФМ* (IRM-0,2-MIFI) type. A panel-type coordinate recorder is currently being developed (cf. Gur'yakov, I.I. *Priborostroyeniye*, no. 12, 1959). The Institute of Mechanical Engineering and Automatics, AS UkrSSR, has constructed a compact portable device which draws the $P=f(\Delta l)$ curve on paper sheets 300x280 mm with an error of 0.5% [cf. Chayevskiy, M.I., in *zbornik "Temperaturni*
Card 2/3

Multiplex mechanical testing...

S/735/61/000/000/010/014

napruzhyennya v tonkostinnykh konstruktsiyakh - Temperature stresses in thin-walled structures," (in Ukrainian). Vyd-vo AN URSR, 1959; Chayevskiy, M.I., Kondratenkov, I.V., An Instrument for the recording of $y=f(x, z)$ curves. In the present publication. Test data for hollow specimens of 2X13 (2Kh13) steel, OD 10mm, ID 5mm, l 30mm) in air and in Pb-Sn eutectic. The only appreciable effect of the Pb-Sn eutectic (increased ductility) occurs at temperatures of 600-700°C. Similar tests with solid 1X18H9T (1Kh18N9T) steel specimens (same OD and length) did not reveal any effects on the tensile strength and ductility attributable to the Pb-Sn eutectic. This is in contrast with the improvement in the fatigue strength of notched samples of the same steel observed by M.I. Chayevskiy (see pp. 54-61 of the present publication, Abstract S/735/61/000/000/007/014). The present equipment can be adapted for creep tests with simultaneous imposition of a vibrational load by addition of the device developed by M.I. Chayevskiy and A.N. Tynnyy (see pp. 11-18 of the present publication, Abstract S/735/61/000/000/002/014), with the added installation of a damper required for a smooth transition through any resonance-frequency bands encountered during the acceleration of the vibrator to a desired speed. A universal or multiplex testing machine is thus achieved. There are 3 figures and the 5 Soviet references (4 Russian-language, 1 Ukrainian-language) cited in the abstract.

ASSOCIATION: None given.

Card 3/3

42747

S/124/62/000/011/017/017
D234/D308

10.8100

AUTHORS: Maksimovich, G. G., Yanchishin, F. P., Popovich, V. V.,
Nagirnyy, S. V. and Karpenko, G. V.

TITLE: Machines for micromechanical testing of metals for du-
rability under variable extension in different media

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 11, 1962, 68, ab-
stract 11V570 (In collection: Mashiny i pribory dlya
ispytaniy metallov, Kiev, AN UkrSSR, 1961, 41-46)

TEXT: For fatigue testing of micro-specimens 1 - 3 mm in diameter
under variable stress, a machine has been designed in which the va-
riable load is realized by means of a vibrator with uniform rota-
tion of unbalanced mass. Constant load is produced by weights sus-
pended on spring through the vibrator. Total load is determined by
ring dynamometer whose deformations are recorded by wire resistance
tensometers. Programmed loading is possible by means of a d.c. mo-
tor with additional variable resistance in the supply circuit. Test
data are given for specimens of steel in 45 different media. [Ab-
stracter's note: Complete translation.]
Card 1/1

CHAYEVSKIY, M.I.; SHATINSKIY, V.F.; POPOVICH, V.V.

Thermomechanical treatment of machine parts to protect them from the weakening effects of surface-active media. Dokl. AN SSSR 152 no.5:1096-1099 0 '63. (MIRA 16:12)

1. Institut mashinovedeniya i avtomatiki AN UkrSSR. Predstavleno akademikom P.A.Rebinderom.

CHAYEVSKIY, M.I.; POPOVICH, V.V.

Remodeling of the MP-4G machine for the tensile test with
automatic recording of the diagram $P=f(\Delta L)$. Zav.lab.27 no.2:218-
219 '61. (MIRA 14:3)

1. Institut mashinovedeniya i avtomatiki AN USSR.
(Testing machines)

POPOVICH, V.V.

Overhead conveyor with a bushed-roller single-row chain.

Mashinostroitel' no.6:9 Je '64.

(MIRA 17:8)

YATSYUK, A.I., kand. tekhn. nauk; POPOVICH, V.V., inzh.

Surface-grinding machine with a spring-supported table
plate for polishing wood with abrasive wheels. Lsa.,
bun. 1 der. prom. no.1:5-9 '65. (MIRA 18:12)

BOGATYREV, I.S.; POPOVICH, V.Ya., glavnyy vrach; SHUMILIN, I.N., glavnyy vrach.

Acute appendicitis and pregnancy. Akush. i gin. no.3:67-68 My-Je '53.
(MLRA 6:7)

1. Khankayskaya rayonnaya bol'nitsa Primorskogo kraya (for Bogatyrev and Popovich). 2. Galichskaya rayonnaya bol'nitsa Kostromskoy oblasti (for Bogatyrev and Shumilin).

(Pregnancy, Complications of) (Appendicitis)

S/147/62/000/004/010/019
E031/E113

AUTHOR: Popovich, V.Ye.

TITLE: Application of the method of successive approximations to problems of stability and oscillation of elastic systems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, no.4, 1962, 103-110

TEXT: For the equation

$$M[y] = \lambda N[y] \quad (1)$$

where $M[y]$ and $N[y]$ are linear differential operators of orders m and n ($m > n$) respectively, with m homogeneous boundary conditions it is required to determine the eigenvalues λ , the algebraic equation for which is built up by successive approximations obtained from equations of the form

$$M[y_j] = \lambda N[y_{j-1}] \quad (7)$$

starting with the initial approximation $M[y_0] = 0$.
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Application of the method of ...

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The general solution of Eq.(1) has the form:

$$y = \sum_{i=1}^m c_i \left[\varphi_i + \sum_{j=1}^{\infty} u_{ji}^* \right] \quad (8)$$

where the c_i are arbitrary constants, the φ_i are solutions of $M[y_0] = 0$ and the u_{ji}^* are partial solutions of Eq.(1) using the values $u_{(j-1)i}^*$ on the right hand side. The infinite series converges for all values of i . Applying the boundary conditions, a homogeneous system of equations for the c_i are obtained whose determinant yields an algebraic equation of infinite order for λ . By considering finite numbers of terms in this equation bounds on the roots can be derived and an estimate made of the error. If Eq.(1) has the form

$$M[y] = \lambda N[y] + L[y] \quad (12)$$

where

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Application of the method of ...

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$$L[y] = \sum_{k=0}^{\infty} \rho_K(x) y^{(k)}, \quad \infty < m$$

the above method can still be applied but the two sided estimate of the solution for λ is not obtained.
There are 4 figures.

SUBMITTED: April 13, 1962

Card 3/3

MORACHEVSKIY, A.G.; POPOVICH, Z.P.

Liquid - vapor equilibrium and mutual solubility of components
in the system tert-butyl alcohol - sec-butyl alcohol - water.
Zhur.prikl.khim. 38 no.9:2129-2131 S '65. (MIRA 18:11)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

POPOVICHENKO, A.G.

Simplified swine houses. Zhivotnovodstvo 21 no.9:82
S '59. (MIRA 13:1)

1. Glavnyy zootekhnik Novo-Pokrovskoy inspeksii po sel'skomu
khozyaystvu Krasnodarskogo kraya.
(Swine houses and equipment)

POPOVICHENKO A.I.

USSR / Human and Animal Morphology, (Normal and Pathological).
Nervous System.

S

Abs Jour : Ref Zhur - Biol, No 21, 1958, No 97055

Author : ~~Popovichenko, A. I.~~

Inst : Karaganda Medical Institute

Title : On Age Morphology of the Stellate Ganglion

Orig Pub : Tr. Karagandinsk. med. in-ta, 1957, 1, No. 2, 135-139

Abstract : It was shown on 304 stellate ganglia (SG) of men and cats of various ages that in a 5-6 months old human foetus, SG is lobular and covered by a delicate connective tissue capsule. With age, the size of SG increases and, at 7 years of age, reach 2.5 x 6 mm, and 11 x 6 mm at 17-20 years of age. Increase of the size of nerve cells of SG is also observed. In the group age 30-40 years, atrophied cells and degenerated nerve fibers are encountered; in some cells, accumulations

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TRET'YAK, Ivan Filippovich; POPOVICHENKO, ~~Akim~~ Petrovich-

[Lupine and collective farm economy; practices of collective farms in Chernigov Province, Polesye]. Liupin i ekonomika kolkhozov; opyt kolkhozov Chernigovskogo Poles'ia. Moskva, Gos. izd-vo selkhoz lit-ry, 1958. 39 p. (MIRA 12:1)
(Chernigov Province--Lupine)

BAYER, V.G.; MASINO, M.A.; MASLOV, N.N.; POPOVICHENKO, G.D.;
SOBOLEV, N.N.; KALOSHIN, A.I., inzh., retsenzent;
SAFRONOV, S.P., inzh., retsenzent; NAUMOV, V.I., kand.
tekhn. nauk, red.; YURKEVICH, M.P., inzh., red. izd-va;
SHCHETININA, L.V., tekhn. red.

[Mechanic for repairing motor vehicles and tractors]
Slesar' po remontu avtomobilei i traktorov. [By] B.G.
Baer i dr. Moskva, Mashgiz, 1963. 318 p. (MIRA 16:10)
(Motor vehicles--Maintenance and repair)
(Tractors--Maintenance and repair)

POPOVICHENKO, G.D.

135-9-2/24

AUTHORS: Kazartsev, V.I., Professor and Doctor of Technical Sciences
and Popovichenko, G.D., Candidate of Technical Sciences

TITLE: Resurfacing of Worn Automobile Parts by Automatic Arc-Welding
under Flux (Vosstanovleniye iznoshennykh avtomobil'nykh deta-
ley avtomaticheskoy naplavkoy pod flyusom)

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 9, p 4-8 (USSR)

ABSTRACT: The article describes in detail the technology of automatic
resurfacing of cylindrical, normalized, improved, and hard-
ened automobile parts made of carbon steel and of low-alloy
steel. It is stated that at the present time such parts
are manually resurfaced. A welding machine, consisting of
a converted lathe, a semi-automatic welder, and an electric
generator, was utilized. Since it was almost impossible to
remove the slag crust from the metal after surfacing small
hollow parts, a special water nozzle (shown by Fig 1) was
designed for cooling the inside of the part being resurfaced.
With the use of this nozzle, no difficulty in removing slag
was encountered. Heat removal was intensified when sur-
facing small solid cylindrical parts by applying in two

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